



Cochlear™ Nucleus® Sound Processors

Inspired by possibilities

Compare our latest technology
with previous generation devices



Key features			
<div><div><div><div><div><div></div><div>Nucleus 6 Sound Processor</div><div>(Retired March 31, 2023)</div></div><div><div></div><div></div><div></div></div></div><div><div><div><div><div></div><div>Nucleus 7 Sound Processor</div></div><div><div></div><div></div><div></div></div></div><div><div><div><div><div></div><div>Nucleus Kanso® 2 Sound Processor</div></div><div><div></div><div></div><div></div></div></div></div></div></div></div></div></div></div>			
Processor type	Behind-the-ear (BTE)	Behind-the-ear (BTE)	Off-the-ear (OTE)
Size and weight comparison	Nucleus 8 is 32% smaller and 34% lighter than Nucleus 6 ^{1,^}	Nucleus 8 is 15% smaller and 13% lighter than Nucleus 7 ^{1,#}	Kanso 2 and Kanso 3 are 2.4% smaller than Kanso ¹
Automated sound processing technology	SmartSound iQ with SCAN	SmartSound iQ with SCAN	SmartSound iQ with SCAN
ForwardFocus		✔	✔
Dual microphone directionality	✔	✔	✔
Battery type	Standard and compact rechargeable or disposable	Standard and compact rechargeable or disposable	Built-in rechargeable battery
Rechargeable battery charger	✔	✔ Y charger for home and USB portable charger	✔ All-in-one Home Charger and Portable Charger
Direct streaming capability	Via Cochlear Wireless Phone Clip	Compatible* Apple® or Android™ devices Cochlear Wireless Phone Clip*	Compatible* Apple or Android devices Cochlear Wireless Phone Clip
Control	Remote Control (CR210) and Remote Assistant (CR230)	Nucleus Smart App* and Remote Control (CR310)	Nucleus Smart App* and Remote Control (CR310)
FM connectivity	Via Euro Accessory Adapter and Roger X FM receiver or Cochlear Wireless Mini Microphone 2+ and Roger X FM receiver	Via the Cochlear Wireless Mini Microphone 2+, Roger X FM receiver and Roger 20 FM receiver	Via Cochlear Wireless Mini Microphone 2+
Bimodal streaming with compatible ReSound hearing aids*		✔	✔
Water-safe accessories	✔	✔	✔
Retention accessories	Snugfit, Mic Lock, LiteWear	Snugfit, Hugfit™, Koala Clip, Safety Cord/Line, Headband	Safety Cord/Line, Hair clip, Headband, Halo
Compatible with monitor earphones	✔ (CP910 only)	✔	Sound Check in the Nucleus Smart App
Nucleus implant compatibility	✔	✔	✔ Except for Nucleus 22 Implants

Key features		
<div><div><div><div><div><div></div><div>Nucleus 8 Sound Processor</div></div><div><div></div><div></div><div></div></div></div><div><div><div><div><div></div><div>Nucleus Kanso® 3 Sound Processor</div></div><div><div></div><div></div><div></div></div></div></div></div></div></div></div>		
Processor type	Behind-the-ear (BTE)	Off-the-ear (OTE)
Size and weight comparison	Smallest and lightest BTE sound processor ²	Smallest and lightest OTE sound processor ¹
Automated sound processing technology	SmartSound iQ 2 with SCAN 2	SmartSound iQ 2 with SCAN 2
ForwardFocus	✔ Improved noise reduction (Option to automate)	✔ Improved noise reduction (Option to automate)
Dual microphone directionality	✔	✔
Battery type	Power Extend, Power Compact, & Compact rechargeable or disposable	Built-in rechargeable battery
Rechargeable battery charger	✔ Y charger for home and USB portable charger	✔ All-in-one Home Charger and Portable Charger
Direct streaming capability	Bluetooth® LE Audio** locations and devices, including compatible* Apple or Android devices Cochlear Wireless Phone Clip	Bluetooth® LE Audio** locations and devices, including compatible* Apple or Android devices Cochlear Wireless Phone Clip
Control	Nucleus Smart App* and Remote Control (CR310)	Nucleus Smart App* and Remote Control (CR310)
FM connectivity	Via Cochlear Wireless Mini Microphone 2+ with a three-pin Euro receiver and Roger 20 receiver	Via Cochlear Wireless Mini Microphone 2+ with a three-pin Euro receiver
Bimodal streaming with compatible ReSound hearing aids*	✔	✔
Water-safe accessories	✔	✔
Retention accessories	Snugfit, Hugfit, Koala Clip, Safety Cord/Line, Headband	Safety Cord/Line, Hair clip, Headband, Halo
Compatible with monitor earphones	✔	Sound Check in the Nucleus Smart App
Nucleus implant compatibility	✔ Except for Nucleus 22 Implants	✔ Except for Nucleus 22 Implants

Why it matters

A behind-the-ear sound processor is worn on the ear and a small coil is held in place against the head with a magnet. An off-the-ear sound processor provides a more discreet hearing solution while delivering an equivalent hearing experience as a behind-the ear sound processor ¹⁻³
At 15% smaller# than the Nucleus 7 Sound Processor and 32% smaller than Nucleus 6, [^] the Nucleus 8 Sound Processor takes comfort to the next level. ¹ The Kanso 3 Sound Processor is 21% smaller and 11% lighter than any other manufacturer's rechargeable off-the-ear sound processor. ^{1,∞, Δ}
The Nucleus 8 and Kanso 3 Sound Processors feature smarter hearing technology^^ designed to make communicating with people, particularly in noise, easier. As you move through the day, your new sound processor senses changes in your listening environment and automatically adjusts using enhanced SmartSound® iQ 2 with SCAN 2 to deliver clearer sound. ^{3-6 ,>,>>}
The Nucleus 8 and Kanso 3 Sound Processors feature an improved ForwardFocus that more powerfully reduces background noise when you want to focus on face-to-face conversation. ^{6,*} Now you can choose to operate ForwardFocus manually via the Nucleus Smart App or have it automated. ^{1,†}
The Nucleus 8 and Kanso 3 Sound Processors have dual-microphone technology with fixed and adaptive directionality which filters out background noise to enhance your understanding of speech, particularly in noise. ⁷
With the choice of either disposable or three different rechargeable battery options, you can choose the best way to power your Nucleus 8 Sound Processor. The Kanso 3 Sound Processor features a powerful, built-in rechargeable battery that you can rely on for all-day hearing. ^{18,*}
Whether you're at home, at work or away, your Nucleus 8 Sound Processor can be easily and conveniently recharged. The Y charger can recharge two batteries at the same time while the USB charger is an optional accessory for recharging one battery when you're on the go. With the Kanso 3 Sound Processor Home Charger, you can conveniently charge and dry your sound processor at the same time.
Ready for next-generation Bluetooth® LE Audio technology,** the Nucleus 8 and Kanso 3 Sound Processors will make it easier to bring sound to you—in more places and from more devices than ever before. ^{8-10,21} In the future, once the Auracast™ protocol has been adopted by public venues, you'll be able to connect directly to audio being broadcast at places like airports, conference centers and theatres.** And whether you're listening to music, taking a phone call, or watching your favorite movie, Bluetooth® LE Audio delivers better sound quality than its previous generation Bluetooth Classic® to help you get the best possible audio experience. ^{8,10,*}
With the Nucleus Smart App, ^{9,*} you can adjust your hearing settings, track hearing information and set daily goals for listening to speech. Where available, you may even save yourself a trip to the clinic by using our Remote Care solutions ^{17,23,†} to do a hearing check or video appointment with your clinician from home. For added peace of mind, the Find My Processor feature ⁹ can help locate a misplaced processor. If you don't have a compatible smartphone, you can change simple settings with the remote control.
FM systems are among the most common hearing assistive technologies used with children, especially in school environments. They are designed to provide improved hearing in noisy situations or over a distance.
Designed to deliver a rich hearing experience, a bimodal solution can help you better locate where sound is coming from, enhance your music appreciation, and enjoy an improved quality of life than with hearing aids alone. ¹⁴⁻¹⁶ Stream sound simultaneously to both your Nucleus 8 or Kanso 3 Sound Processor and compatible ReSound hearing aid with a smart bimodal hearing solution* that's ready for next-generation Bluetooth® LE Audio technology. ^{9-10,*}
When fitted with Aqua+, your Nucleus 8 or Kanso 3 Sound Processor becomes waterproof so you can immerse yourself in your favorite water activities. ^{19-20,~,*}
Cochlear Nucleus sound processors offer a wide range of retention options to suit your individual needs and lifestyle.
Check the sound quality of the microphone or accessory input to your child's or another's sound processor.
Our research and development is focused on offering the best hearing possible today, while also anticipating how technology and recipient needs will change over time. Cochlear is committed to ongoing innovation and developing new ranges of exciting products to help you achieve your best possible hearing outcomes at every stage of life.

Hear now. And always

Comparison made using the Compact Battery Module for Nucleus 8 Sound Processor and the Compact Rechargeable Battery for Nucleus 7 Sound Processor

^ Comparison made using a Compact Battery Module with Nucleus 8 Sound Processor and an equivalent Compact Rechargeable Battery with Nucleus 6 Sound Processor.

^^ Compared to previous generation Nucleus 7 and Nucleus 6 Sound Processors.

∞ with the smallest magnet option

Δ Competitor volume comparisons are based on CAD models generated by Cochlear from competitor images and dimensions from literature. While these CAD models are estimates, they show that CP1150, CP1170 & CP1175 are smaller than these competitors.

> It is recommended that SNR-NR, WNR and SCAN be made available to any recipient, ages 6 and older, who is able to 1) complete objective speech perception testing in quiet and noise in order to demonstrate and document performance and 2) report a preference for different program settings.

>> SNR-NR, WNR and SCAN are FDA approved for use with any recipient ages 6 years and older, who is able to: 1) complete objective speech perception testing in quiet and in noise in order to determine and document performance; and 2) report a preference for different program settings.

+ Compared to Nucleus 7 Sound Processor with ForwardFocus on.

† ForwardFocus is a clinician-enabled feature that can be user-controlled or automated. ForwardFocus can only be enabled by a hearing implant specialist. It should only be activated for users 12 years and older who are able to reliably provide feedback on sound quality and understand how to use the feature when moving to different or changing environments.

~ The Cochlear Nucleus 8 Sound Processor is dust and water resistant to level IP68 of the International Standard IEC60529 when you use a compatible rechargeable battery module. The Nucleus 8 Sound Processor with Aqua+ is dust and water resistant to level of IP68 of the International Standard IEC60529. The Nucleus 8 Sound Processor with Aqua+ can be continuously submerged under water to a depth of up to 3 meters for up to 2 hours. The Aqua+ accessory should be used when participating in prolonged water activities. Refer to the relevant user guide for more information.

± The Kanso 3 Sound Processor with Aqua+ is dust and water resistant to level of IP68 of the International Standard IEC60529 and can be continuously submerged under water to a depth of up to 3 meters (9 feet and 9 inches) for up to 2 hours. The Aqua+ accessory should be used when participating in prolonged water activities. Refer to the relevant User Guide for more information.

* For compatibility information and devices visit: [cochlear.com/compatibility](https://www.cochlear.com/compatibility) and [resound.com/compatibility](https://www.resound.com/compatibility). The Cochlear Nucleus Smart App is available on App Store and Google Play.

** As Bluetooth LE Audio compatible devices become available, a sound processor firmware update will be required to use certain features. Auracast™ broadcast audio capability is subject to third party adoption of the Auracast protocol. The Bluetooth® and Auracast™ word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Cochlear is under license.

✱ Battery life varies for every user, according to the age of the battery, programs used each day, your implant type, the thickness of skin covering your implant, and the size and type of battery. Typical expected battery life is calculated using default map settings used with a CI1000 series implant. All day hearing is defined as 16 hours.

¶ Remote Care is not available in all markets and patient must have cellular or WiFi connection for use of Remote Care features.

Please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always read the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information. Android is a trademark of Google LLC.

Apple is a trademark of Apple Inc., registered in the U.S. and other countries.

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References

- Cochlear Limited. D1190805 Processor Size Comparison. 2023.
- Mauger SJ, Warren C, Knight M, Goorevich M, Nel E. Clinical evaluation of the Nucleus 6 cochlear implant system: performance improvements with SmartSound iQ. International Journey Of Audiology. 2014, Aug; 53(8): 564-576. [Sponsored by Cochlear].
- Mauger S, Jones M, Nel E, Del Dot J. Clinical outcomes with the Kanso™ off- the-ear cochlear implant sound processor. International Journal Of Audiology. 2017, Jan 9; 1-10. [Sponsored by Cochlear].
- Wolfe J, Neumann S, Marsh M, Schafer E, Lianos L, Gilden J, O’Neill L, Arkis P, Menapace C, Nel E, Jones M. Benefits of Adaptive Signal Processing in a Commercially Available Cochlear Implant Sound Processor. Otol Neurotol. 2015 Aug; 36(7):1181-90. [Sponsored by Cochlear].
- Cochlear Limited D1864200 SCAN 2 Design Description. 2023.
- Cochlear Limited. D1964109 Clinical Investigation Report CLTD5804 – Feb 2022.
- Sivonen V, Willberg T, Aarnisalo A, Dietz A. The efficacy of microphone directionality in improving speech recognition in noise for three commercial cochlear-implant systems, Cochlear Implants International, 2020; 21:3, 153-159.
- Introducing Bluetooth® LE Audio, Nick Hunn. January 2022 <https://www.bluetooth.com/learn-about-bluetooth/recent-enhancements/le-audio/>.
- Cochlear Limited. D1631375 Nucleus 8 Sound Processor Product Definition.
- Bluetooth® SIG Website. Technical Overview of LC3. <https://www.bluetooth.com/blog/a-technical-overview-of-lc3/>
- Wolfe J, et al. Evaluation of a wireless audio streaming accessory to improve mobile telephone performance of cochlear implant users. International Journal of Audiology. 2016; 55(2):75-82.
- Wolfe J, et al. Improving hearing performance for cochlear implant recipients with use of a digital, wireless, remote-microphone, audio-streaming accessory. J Am Acad Audiol. 2015 Jun; 26(6):532-9.
- Warren C, Nel E, and Boyd P. Controlled comparative clinical trial of hearing benefit outcomes for users of the Cochlear™ Nucleus® 7 Sound Processor with mobile connectivity. Cochlear Implants International (2019 Feb); 20(3).
- Gifford RH, Dorman MF, McKarns SA, Spahr AJ. Combined electric and contralateral acoustic hearing: Word and sentence recognition with bimodal hearing. Journal of Speech, Language, and Hearing Research. 2007 Aug 1; 50(4):835-43.
- Firszt JB, Reeder RM, Holden LK, Dwyer NY; Asymmetric Hearing Study Team. Results in Adult Cochlear Implant Recipients With Varied Asymmetric Hearing: A Prospective Longitudinal Study of Speech Recognition, Localization, and Participant Report. Ear Hear. 2018 Sep/Oct; 39(5):845-862.
- Potts LG, Skinner MW, Litovsky RA, Strube MJ, Kuk F. Recognition and localization of speech by adult cochlear implant recipients wearing a digital hearing aid in the nonimplanted ear (bimodal hearing). Journal of the American Academy of Audiology. 2009 Jun 1; 20(6):353-73.d1715545.
- Cochlear Limited D1715545 NSA product definition (inc Remote Check).
- Cochlear Limited. D2143268. Kanso 3 Sound Processor Battery Estimations with CI1000 Implants. 2023.
- Cochlear Limited. D2105671. CP1170/CP1175 IEC60529 Ingress Protection Test Report IP68. 2023.
- Cochlear Limited D1980144 CP1110 IEC60529 IP68 Certificate & Test Report.
- Cochlear Limited. D1930947. CP1170 and CP1175 Sound Processor Product Specification. 2023.
- Cochlear Limited D1660797 P1150 Sound Processor Interim Clinical Investigation Report, 2020: Jan. Data on file.
- Cochlear Limited. D1698858. Evaluation of Remote Care App and Nucleus Smart App with CP1000 sound processor. Clinical Investigation Report. 24 Feb, 2020.



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